

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	14	((("4983544") or ("5783486") or ("6251711") or ("6316323") or ("6440851") or ("6627527") or ("66577244") or ("20030222320")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/11 14:20
S2	1916	stress and bridging and void	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 10:18
S3	69331	silicide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 10:18
S4	76	S2 and S3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 10:18
S5	3	("6410429").URPN.	USPAT	OR	ON	2005/09/05 10:33
S6	10	("5047367"   "5194405"   "5449642"   "5536684"   "5567652"   "5728625"   "5731239"   "5766997"   "5924010"   "5970370").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 10:39
S7	321	cobalt adj disilicide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:28
S8	35770	titanium adj nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 10:39
S9	105	S7 and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 10:39

## EAST Search History

S10	1	("6388327").URPN.	USPAT	OR	ON	2005/09/05 10:56
S11	29	("5970370").URPN.	USPAT	OR	ON	2005/09/05 11:00
S12	0	co/tin/co	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 11:19
S13	0	"cosi2/tin/co"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 11:19
S14	0	"cosi2/ti/co"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 11:20
S15	0	(cobalt adj disilicide near3 titanium adj nitride) adj cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 11:21
S16	16	cobalt adj capping adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 11:23
S17	2	cobalt adj wiring	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:08
S18	3017	compressive and tensile and cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:08
S19	516928	titanium	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:09

## EAST Search History

S20	1978	S18 and S19	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:09
S21	69331	silicide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:09
S22	268	S20 and S21	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:09
S23	5	cobalt adj disilicide and (delamination or delaminate or delaminated)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 12:29
S24	179952	compressive	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:23
S25	345187	tensile	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:23
S26	665844	lamine or laminated	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:23
S27	6666	S24 and S25 and S26	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:23

## EAST Search History

S28	249294	cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:24
S29	630	S27 and S28	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:24
S30	85312	titanium and nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:24
S31	175	S29 and S30	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:30
S32	2820	critical adj thickness	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:30
S33	35920	delamination	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:30
S34	78	S32 and S33	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:33
S35	16	cobalt adj cap adj layer or cobalt adj cap	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 13:33

## EAST Search History

S36	249294	cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 14:32
S37	116168	(densification or dimensional adj reduction or volumetric)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 14:33
S38	7608	S36 and S37	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 14:33
S39	128110	cmos	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 14:33
S40	179	S38 and S39	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 14:41
S41	1108	titanium adj nitride and capping adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 14:41
S42	273	S36 and S41	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 14:41
S43	1	("6462390").URPN.	USPAT	OR	ON	2005/09/05 15:15
S44	7	("6281102").URPN.	USPAT	OR	ON	2005/09/05 15:24
S45	264	second adj cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 15:24

## EAST Search History

S46	509984	tin or titanium adj nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 15:25
S47	53	S45 and S46	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/05 15:25
S48	5	("6207563").URPN.	USPAT	OR	ON	2005/09/05 15:54
S49	172871	consume or consumed or consumption	USPAT	OR	ON	2005/09/05 15:55
S50	0	sacrificial adj cobalt	USPAT	OR	ON	2005/09/05 15:55
S51	11109	S36 and S49	USPAT	OR	ON	2005/09/05 15:55
S52	684	S39 and S51	USPAT	OR	ON	2005/09/05 15:55
S53	408	S46 and S52	USPAT	OR	ON	2005/09/05 15:56
S54	301902	cap or capping	USPAT	OR	ON	2005/09/05 15:56
S55	107	S54 and S53	USPAT	OR	ON	2005/09/05 15:56
S56	0	("6743721").URPN.	USPAT	OR	ON	2005/09/05 16:00
S57	30	("4885134"   "4920073"   "5047367"   "5282946"   "5302552"   "5344793"   "5356837"   "5451545"   "5536684"   "5567651"   "5728279"   "5736461"   "5747373"   "5780362"   "5824588"   "5904564"   "5970370"   "5989988"   "6022457"   "6022795"   "6025274"   "6083817"   "6100191"   "6190516"   "6251780"   "6323130"   "6376373"   "6413859"   "6440851"   "6444578").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 16:00
S58	2	("6207563").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/09/05 16:35

## EAST Search History

S59	51	titanium adj nitride adj capping adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 13:52
S60	256798	cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 13:52
S61	91	titanium adj nitride adj capping adj layer or tin adj capping adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 13:52
S62	45	S60 and S61	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 14:02
S63	3859407	cobalt adj capping layer or co adj capping adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 14:02
S64	21	cobalt adj capping adj layer or co adj capping adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 14:03
S65	1316	(438/592).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/11 13:43
S66	278	second adj cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 16:21

## EAST Search History

S67	522558	tin or titanium adj nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 16:22
S68	59	S66 and S67	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 16:26
S69	42	titanium adj capping adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 16:32
S70	19	cobalt adj cap	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 16:34
S71	9	compressive adj stress near4 titanium adj nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/07 16:46
S72	1344	(tensile or compressive) same (cobalt and titanium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:29
S73	522558	tin or titanium adj nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:29
S74	365	S72 and S73	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:29

## EAST Search History

S75	213864	anneal or annealing	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:29
S76	79	S74 and S75	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:34
S77	75	cobalt adj silicide near4 titanium adj nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:35
S78	493048	compressive or tensile	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:35
S79	1	S77 and S78	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/08 09:35
S80	2	("6344411").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/08 10:25
S81	1323	(438/592).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/11 13:43
S82	4	(cosi or cobalt adj silicide) and (tin or titanium adj nitride) and (cobalt adj capping adj layer or co adj capping adj layer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:44

## EAST Search History

S83	13	("5403779"   "5608266"   "5624869"   "5874342"   "5902129"   "5970370"   "5989988"   "6060387"   "6063677"   "6063681"   "6072222"   "6080648"   "6136705").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/11 14:23
S84	28	("5902129").URPN.	USPAT	OR	ON	2006/03/11 14:27
S85	7	("5047367"   "5902129"   "5970370"   "6121139"   "6150249"   "6399467"   "6410429").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/11 14:28
S86	0	cosi/tin/co or co/tin/co	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:45
S87	0	cosi/tin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:44
S88	4	(cosi adj tin adj co) or (cobalt adj silicide near titanium adj nitride near cobalt) or (co adj tin adj co)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:47
S89	11	("20040038435"   "5726477"   "5792699"   "5920774"   "6008099"   "6153520"   "6214656"   "6221746"   "6323094"   "6524939"   "6630721").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/11 14:49
S90	161	third adj refractory	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:49
S91	525410	titanium adj nitride or tin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:49

## EAST Search History

S92	53	S90 and S91	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:52
S93	258455	cobalt	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:52
S94	24	S92 and S93	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:55
S95	12	compressive near4 titanium adj nitride	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:56
S96	2	S93 and S95	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:59
S97	238800	void	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 14:59
S98	23538	S91 and S97	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 15:00
S99	5016	S93 and S98	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 15:00

## EAST Search History

S10 0	186240	compressive	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 15:00
S10 1	475	S99 and S100	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 15:00
S10 2	73072	silicide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 15:00
S10 3	81	S101 and S102	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/03/11 15:00